COMMENTS ON THE OCCASION OF THE CENTENARY OF THE NEW ENGLAND BOTANICAL CLUB¹

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In December 1895, William G. Farlow wrote to a number of friends suggesting a meeting at his home on Quincy Street in Cambridge to discuss the formation of a botanical club. A second meeting agreed to such an organization, and at a third meeting on February 5, 1896, the New England Botanical Club was officially founded with seven professional botanists and ten amateur botanists as the charter members. We have no record of others who might have been invited or whether there were refusals. At the fourth meeting in March 1896, Messrs. Fernald, Fuller, Greenman, Jack, John Robinson, and Rich from Boston were elected members; Sears and Bailey from Providence and Jackson from Worcester became the first nonresident members. Since Fernald was a student at the time, he became the first student member of the NEBC.

With some knowledge of organizations then active, I have wondered why the New England Botanical Club was organized. Asa Gray had died in 1888 and Louis Agassiz before him, so there was no leader in the natural sciences in the Boston area. Sereno Watson, Gray's immediate successor at the Botanic Garden, and his successor, Benjamin Robinson, had no major impact in Boston science or society. Charles Sargent was concerned only with the Arnold Arboretum. The Darwin controversy had subsided in the Boston area. Farlow, Gray's protégé for nonvascular plant collections, was outshone by George Goodale, who handled Gray's teaching chores and areas of physiology, morphology, and, eventually, economic botany. Both Farlow and Goodale had separated their activities and collections from the Botanic Garden and the herbarium, creating their own departments at the Agassiz

The following is derived from the remarks delivered to The New England Botanical Club at its Centennial Banquet on November 1, 1996. Readers interested in more information about the history of the Club and its founding members should refer to Dr. Howard's paper "A partial history of The New England Botanical Club," published in *Rhodora* 75: 493–516 (1973).—*Ed*.

Museum in the campus area in Cambridge. Since Goodale was a better speaker and a more successful fundraiser for the more appealing collections he curated, he was better known in the Boston area. He was one of the charter members of the NEBC.

The oldest of the learned societies in America was the American Philosophical Society, founded in Philadelphia in 1771. The American Academy of Arts and Sciences was organized in 1780. Asa Gray was an active member after his arrival in the Boston area in 1842. He served as president for 10 years (1863–1873) and published frequently in the *Proceedings* of the Academy. In 1791 the Massachusetts Historical Society was founded, the earliest in the United States, and the following year, 1792, the Massachusetts Society for Promoting Agriculture was organized. The Boston area botanists were not involved in either of these.

Other learned societies in New England were represented by athenaeums, Linnaean societies, lyceums, natural history societies, horticultural societies, and scientific clubs. I want to comment briefly on each group.

ATHENAEUMS

The Athenaeum was "an institution or society for the promotion of literary and/or scientific learning." The first one in New England was founded in 1753 in Providence, Rhode Island. The Boston Athenaeum, founded in 1807, was to have "a reading room, a library, a museum, and a laboratory." It remains active as a membership organization to this day. The "museum and a laboratory" were never developed, but an art collection begun in 1827 preceded the Boston Museum of Fine Arts by 43 years.

LINNAEAN SOCIETIES

The Linnaean Society of London was founded in 1788. Similarly named societies with comparable interests developed worldwide, but without official linkage to the London group. In 1815, the New England Society for the Promotion of Natural History changed its name to the Linnaean Society of New England. This was dissolved in 1823 but re-established seven years later in 1830 as the Boston Society of Natural History. Later it was renamed the Boston Museum of Natural History and maintained its head-quarters, museum, library, series of publications, and an active

program until 1941. It then became the Museum of Science, disposing of its collections and the Berkeley Street building in favor of new quarters and programs in its present location on the Charles River Dam.

During its most active period the Boston Museum of Natural History offered the free Lowell lectures, for which George Goodale was a speaker six times. The Museum's Teacher's School of Science was instrumental in early teaching of natural history in Boston schools. Farlow gave "botany lectures" in the series, and Goodale gave "a comprehensive course of twenty-one lectures on morphological, physiological, and systematic botany to an audience averaging 120 students." Goodale introduced the technique of printed synopses of his lectures, which developed into the published Guides for Science Teaching. He supplied dried as well as fresh specimens in sets for the students to use in their teaching. A survey of Massachusetts plants was requested by the Commonwealth of Massachusetts, and the resulting work by Prof. Chester Dewey of the Berkshire Medical Institute (herbaceous plants) and George Emerson (trees and shrubs) was published by the Society between 1839 and 1846. Walker prizes for essays on designated themes or topics in science were offered between 1864 and 1876 and continued in recent years by the Museum of Science as awards for outstanding scientists, especially local Nobel prize winners.

The Linnaean Society of New York was founded in 1878 and continues to the present with the name intact. The organization's primary interest is in "natural science, conservation, especially ornithology, including sponsored field trips." It is open to amateurs and professionals.

LYCEUMS

Lyceums were created "in remembrance of the school founded by that sublime genius, Aristotle, at Athens." Originally, they were debating societies or discussion groups for the "dissemination of useful knowledge." There is an estimate that 3,000 lyceum programs existed at one time. The Lyceum of Natural History of New York was founded in 1817. In 1833 John Torrey was a member, and in 1835 Torrey's associate, Asa Gray, was appointed curator of the Lyceum's botanical collections. In Massachusetts there was a lyceum in Worcester in 1825 which has

been renamed many times: the American Lyceum of Science and Arts for Worcester County (1826), the Worcester County Lyceum (1829), the Lyceum and Library Association (1866), the Worcester Natural History Society (1884), and the Worcester Science Center, before becoming the New England Science Center in 1986. In the decade between 1829 and 1838 there were active Lyceums in Millbury, Littleton, Shrewsbury, Marlborough, Petersham, Barre, and at Williams College. The Littleton Lyceum remains active to the present, no longer presenting mainly lectures, debates, and discussions, but now offering also programs of music, mime, and drama. A cadre of speakers developed that moved from city to city presenting programs at local lyceums. Henry David Thoreau was the most noteworthy of the naturalists on the lecture circuit. No members of the future NEBC appear on program lists available. The Chautauqua Library and Scientific Society, organized in 1878 in New York state, essentially represented a travelling lyceum program.

HORTICULTURAL SOCIETIES

The New York Horticultural Society was incorporated in 1822, and the Pennsylvania Horticultural Society was organized in 1827 and chartered in 1831. The Massachusetts Horticultural Society, founded in 1829, offered a very active and diverse program before the founding of the NEBC. Flower shows were at various times offered weekly, and lectures were scheduled regularly. The Harvard Botanic Garden (with contributions from Asa Gray), the Bussey Institution (with contributions from Jackson Dawson), Charles Sargent, and, later, the Arnold Arboretum were strong supporters and exhibitors. In 1877 the Massachusetts Horticultural Society began a scientific lecture series. Assistant Professor George Goodale told of poet Goethe's conclusions that parts of flowers were modified leaves. The records also report that Darwin and his writings were discussed, and surprise was expressed that Goodale differed from Darwin on many points. B. D. Halsted of the Bussey Institution talked on injurious fungi, Rev. J. V. Russell lectured on cryptogamic botany, and William Farlow talked on diseases of forest trees. In 1841, before coming to Harvard, Asa Gray presented a talk and was elected a corresponding member. He was listed as "professor of botany and plant physiology" at the Society in 1860-62, although it is noted: "His interest lay in

scientific study rather than cultivation and he has been of great service to the library." Charles Sargent was listed as professor of botany in 1891–92.

NATURAL HISTORY SOCIETIES

There were many active natural history societies in New England. The Providence (Rhode Island) Franklin Society was formed in 1821, held weekly meetings, and in 1877 established a botanical section to create a catalogue of Rhode Island plants. The secretary recorded that "a feature of the meetings so far has been the attendance of a number of ladies and we can safely affirm an increasing interest in our beloved science in this community."

Essex County had a Natural History Society (1833) and the Essex Institute (1834); the two merged in 1848 and created departments of natural history, history, and horticulture. Flower shows were held regularly, especially exhibitions of vegetables. In 1854 J. F. Allen had a fine garden in Salem and must have had greenhouses, for he published an elaborate elephant folio on Victoria regia, which had been brought into flower. George Peabody was born in Danvers, Massachusetts, in 1795. He amassed a fortune in Anglo-European trade and made generous gifts to New England. In 1853 he made a gift of \$100,000 to Yale, where his nephew was the paleontologist, Prof. Marsh. In 1862 Peabody promised Harvard President Edward Everett \$100,000 in support of astronomy and art, but the local scientific circles "helped direct" this gift to the design of a museum of archeology and anthropology. Peabody died in 1867, leaving a bequest of \$140,000 to support the study of natural history in Essex County. The Peabody Academy of Sciences was formed in 1868 with this money and with Asa Gray as one of its trustees. Its publications had few articles on botany. The outstanding were Robinson's lists of ferns of North America north of Mexico, later revised by D. C. Eaton, and an article on the strength and fuel value of native woods, which Robinson had extracted from Sargent's report on the forests of North America. The lecture series and courses at the Peabody Academy featured offerings in botany by Goodale, Robinson, John Sears, C. E. Bessey, and D. P. Penhallow. Between 1876 and 1881 the Academy offered a Summer School in Biology patterned after Agassiz's school on Penikese Island. Dr. Packard of Peabody was the director, and John Robinson, Goodale, Penhallow, and Bessey were the instructors. In 1880 the Academy decided not to compete with the Boston Museum of Natural History or the Museum of Comparative Zoology in acquiring general collections, but to concentrate on works of man and the flora and fauna of Essex County. In 1922 the complex was renamed the Peabody-Essex Museum. An herbarium is maintained to the present.

In 1834 the Yale Institute of Natural Sciences was formed and was to become the Yale Natural History Society. The Natural History Society of Hartford (1835) became, in 1845, the Connecticut Society of Natural History. The Maine Institute of Natural History (1836) became the Portland Society of Natural History (1843). The Cuvierian Society of Wesleyan University was alternately known as the Natural History Society of Wesleyan University. In Cambridge, Massachusetts, students organized the Harvard Natural History Society in 1837, creating a cabinet and housing specimens in Massachusetts Hall. Asa Gray lectured to this group on April 18, 1878, on forest geography and archeology. Benjamin Watson, later a charter member of the NEBC, was a member when a student at Harvard. Little more has been located of this club or its collections.

Other natural history groups were formed in Lynn, Massachusetts (1842), Concord, New Hampshire (1846), and Springfield, Massachusetts (1859); other similar organizations were the Boston Amateur Scientific Society (1877), Middlesex Field Club (1881), Natural History Club of West Roxbury (1882), Natural History Club of Boxford, Massachusetts (1882), and the Newport Natural History Society of Rhode Island (1883).

Perhaps the most ambitious amateur natural history undertaking was the Agassiz Association, developed in 1875 by Harlan Hage Ballard of the Lenox Academy in western Massachusetts. The Association was formed while Louis Agassiz was alive, and with his permission. To encourage the study, discussion, collection, and exchange of natural history objects, Ballard encouraged the formation of chapters. Four people could form a chapter and name it. They could be of the same sex or age, as adults, families, or children. At its peak the Association had 1200 "chapters" of 4 to 120 members, with a total of 20,000 members in the United States, Canada, England, Ireland, France, Chile, New Zealand, and Japan! Chapters had meetings, conducted field trips, ex-

changed artifacts, and published newsletters. Correspondence with Ballard was encouraged, and he would redirect the letter to a specialist for a personal reply and future contact. With permission, specimens or artifacts could be submitted for identification, at which time the enclosure of five two-cent stamps to cover postage was requested. An Association pin was available through the manufacturer, who would supply a price list. A chapter certificate was priced at 75 cents. A handbook of the Agassiz Association called Three Kingdoms was published in at least four editions. The fourth, in 1897, mentioned need for an endowment to maintain the organization with a paid staff, but I can find no reference to dues or of payment to Ballard. Ballard maintained contact with scientists in several countries to help answer questions submitted or to conduct correspondence courses. Marcus Jones, E. L. French, W. O. Crosby, Alexander Wight, W. Whitman Bailey, William B. Werthner, John Davis, Jacob Bigelow, and Francis Gay were among the specialists who cooperated with identifications, and who offered correspondence courses. In 1887 the Asa Gray Memorial Botanical Chapter was formed, which eventually had five geographic divisions and a total membership of 44. The chapter issued a publication which became the Asa Gray Bulletin, as well as Reports and the Observer. Also in 1887 there is casual mention of the Asa Gray Botanical Club in Utica, New York, which purchased the Hunt Herbarium and gave it to the Oneida Historical Society. The Linnaean Fern Chapter was also a spinoff of the Agassiz Association in 1893. This group eventually became the American Fern Society and later spawned the Bryological Society.

SCIENTIFIC CLUBS

In 1854 Asa Gray assembled his scientific colleagues, mostly all professors, to regular meetings for professional discussions. No records of a club have been located.

The most successful and longest lasting of the scientific clubs is certainly the Torrey Botanical Club of New York. It began in 1867 with informal meetings with Dr. Torrey. When William H. Leggett compiled a modest four-page monthly news sheet, he named it the *Bulletin of the Torrey Botanical Club*, and the name was adopted. The *Bulletin* became the first botanical periodical in America, and was dedicated to the study of the flora of the

New York City area. There followed a series of noteworthy contributions. In 1873 a Botanical Directory of North America was the first such publication. In 1886 the Index to Recent American Botanical Literature began under the editorship of Elizabeth Britton and Frederick Merrill. It also appeared as a card index in 1890 but was stopped by the Club in 1996 and is being continued in Brittonia by editors at the New York Botanical Garden. The Memoirs of the Torrey Botanical Club met the need, in 1889, for a regular series of publications in monographic form. The first number had an article by Liberty Hyde Bailey entitled "Studies of types of various species of Carex." In 1901 Torreya was created to handle brief communications and those of a popular character. This was combined with the Bulletin in 1946. Beginning in 1997 the Torrey Botanical Club will be renamed a Society and the Bulletin will become the Journal of the Torrey Botanical Society.

Sometime in the 1870s "a few ladies of this city (Syracuse, New York) have formed a club named the Rust Botanical Club, of which Mrs. Rust has been elected president. At first we shall make the study of ferns our specialty, hoping afterwards to study general botany." In 1879 it is reported that the president objected to the eponym, and it was changed to the Syracuse Botanical Club. The Club was "exclusively" for ladies. Numbering 32, they had field meetings twice a week in season, weekly meetings for study, and a business meeting on the third Monday of each month. The Club reported regularly in the Bulletin of the Torrey Botanical Club and by correspondence to Cambridge botanists Gray, Eaton, Peck, Robinson, and Davenport. They were proud of tracing the routes of Frederick Pursh and rediscovering Scolopendrium. In 1912 A Flora of Onondaga County as Collected by the Members of the Syracuse Botanical Club was published. A photograph in the Gray Herbarium archives shows the group of ladies in the field on July 16, 1915. The demise of the Club is not known.

In 1874 there was a Connecticut Valley Botanical Society which had "a very animated meeting at Mt. Holyoke Seminary Wednesday, June 10th." At a meeting on October 6, 1875, Professor Asa Gray was in attendance.

The American Botanical Club was formed in 1883 by members of the American Association of Arts and Sciences for the study of plants by correspondence. In 1892 this became the Botanical

Society of America, which "limited its membership to those who have published worthy work and are actively engaged in botanical investigations."

Eighteen ninety-five proved to be an exceptional year for the formation of botanical clubs. On July 4th a group gathered to explore a mountain plateau in Vermont and to form an association which became the Vermont Botanical Club. Ezra Brainerd of Middlebury and L. R. Jones of Burlington were Vermont residents. Summer visitors included Rev. James A. Bates of South Royalston, Massachusetts, and Marshall Howe, W. W. Eggleston, and A. J. Grout of New York City. Cyrus Pringle and George Perkins of Burlington joined immediately, as did Barnhart of New York. The group planned one summer meeting for a field trip and one winter meeting for papers. Between 1906 and 1914 the Club published a *Bulletin*. Fernald wrote an article "Some Northern Plants Possibly to be Found in Vermont" for the third bulletin, issued in 1908.

On July 12 another group of amateur botanists assembled in Portland, Maine, to organize a botanical club. Asa L. Lane was the first president; Kate Furbish, then 61, was elected vice president, and Merritt Fernald was the first recording secretary. It was Fernald who proposed the name Josselyn Botanical Society to honor *John Josselyn's Rarities*, the first written account of the Maine flora. It was suggested that "Club" was an overworked title; hence the name Josselyn Botanical Society of Maine was adopted. This group has published a *Bulletin* at irregular intervals, the last being Number 13 in 1995.

There is no clear answer to the question of why the New England Botanical Club was proposed in 1895 and organized in 1896. There were active organizations in the Boston area involving both professional and amateur botanists. Not all clubs admitted women, and the NEBC began as a gentlemen's organization. Charter members comprised seven professional botanists and ten amateurs. Brief biographies of them are supplied in previous articles cited in the closing suggestions for additional reading. The group had little in common socially, and varied in professional roles. Nevertheless, the Club flourished for a century, and shows no signs of weakening in its goals or accomplishments.

TRIVIA FROM THE NEBC'S FIRST HUNDRED YEARS

M. L. Fernald was the first student member of the NEBC, being elected at the fourth meeting in 1896. He edited *Rhodora* for 23 years. When he died in 1950 he had been an active Club member for 54 years.

David Pearce Penhallow of McGill University was possibly the first foreign member of the Club, having joined November 6, 1896.

Mary Day, librarian of the Gray Herbarium, published in volume 3 of *Rhodora*, in 1901, a list of 66 private herbaria and a list of 258 local floras as an aid to Robinson in compiling distribution data for the 7th edition of *Gray's Manual*.

The choice of *Rhodora* for the title of the Club's publication was to indicate a primary interest in plants of the same range. Initially, Club members were to concentrate on plants of the Boston region and of the mountains in New England.

Advertisements in *Rhodora* in 1902 drew published criticism from other botanical journals and had to be defended in editorials. The advertisements by the Bangor and Aroostook Railroad stated, "If you are looking for the Best Botanizing in the eastern states, you should save up pennies enough to visit The Aroostook." Among the plants which could be collected easily was *Pedicularis furbishii*, which in recent years was declared to be an endangered species. The editor replied: "Indeed the flora of no other area east of the Rocky Mountains and south of British America seems to us less in need of concealment or special protection."

The NEBC may well be the first to drop page charges to its publication on January 27, 1996.

The NEBC herbarium was started immediately upon the Club's organization. For years it was fumigated with carbon bisulfide, fortunately with no casualties. This dangerous, poisonous, and flammable chemical was proposed for insect control in the *Bulletin de la Société Botanique de France* in 1877.

In 1996 an agreement was made to integrate the NEBC herbarium with the general collections of the Harvard University Herbaria. Currently the NEBC records 251,000 specimens.

Fellowship prizes were offered by the NEBC for the first time in 1985.

For many years candidates for admission were nominated and supported by statements to the membership. "Scrutineers" were appointed and written votes counted and reported. When there were negative votes one such blackball disqualified the candidate.

Women were elected to the Club for the first time on December 6, 1968. Alice Tryon was the first woman elected and the first to serve as President of the NEBC in 1978.

The early meetings of the Club were held in members' homes and subsequently at Young's Hotel and the Twentieth Century Club, and fancy meals were served. Pease reported: "Ample collation—e.g., chicken croquettes, cold joints, salads, escalloped oysters, and ice cream replenished by one or two bustling waiters." With food supplies limited during World War I, the refreshments dropped to crackers and cheese.

The oldest member in longevity was Harold St. John (1911) who died December 12, 1991, at the age of 99 years and five months. The oldest current member is Wayne Manning (1934), who at 97 years answered the telephone in his office. Lyman Smith (1923) and Aaron Jack Sharp (1944) are both 92 at this writing (January 1997).

Bill Benninghoff, elected in 1940, died in 1993 and is buried in Arlington National Cemetery.

The gavel used by the President of the NEBC was turned from a "corner post" of Asa Gray's home on Garden Street.

The first field day of the NEBC was on May 30, 1911, to Providence, Rhode Island.

George Cooley (1953) fell into a volcano on St. Vincent, but his slide was stopped by grasping a bromeliad. He received an honorary Doctor of Science degree from the new University of South Florida before the school had awarded any degree.

Six members of the Club were presidents or chancellors of seven universities.

Edward Rand was called the Bard of the NEBC for his poem, "In the days of Walter Deane." It was sung to the tune of John Brown's Body. The text and other poems are printed in *Rhodora* (75: 493–516. 1973). Perhaps the most quoted poem in the archives is this joke on Arthur Stanley Pease (1902):

Here lies the body of Stanley Pease Buried beneath the venerable trees What lies here is only the pod Pease shelled out and went to God.

No poet laureate for the NEBC has surfaced in recent years, but I felt this centenary deserved some poetic recognition. I'm not a poet, so I asked a friend in Acton who has notable talents in this area to prepare an ode for this occasion, the 100th anniversary. I close with these words supplied by Maurice Sagoff:

If you've enjoyed the historical show You'll surely be pardoned for feeling a glow Of real satisfaction and well-deserved pride In what's been portrayed by each story and slide. So here's to our Club! Though a hundred years old, Its greater achievements have yet to be told. We count in our membership leaders in botany, Proven achievers; some clubs haven't got any. Members of fishing clubs may not have caught any. Hunt clubs don't care if you never have shot any. Teachers in unions may hardly have taught any. Even some legionnaires may not have fought any! But, to our credit, our workers in botany Truly have shown they are worthy of fame. I'll mention a dozen, at random, by name: There's Fernald and Merrill and Harris and Bean,

There's Bogle and Hodgdon and Walker and Pease,
Barrington, Weatherby, Nickerson, and Crow,
Eaton, and Knowlton and Ray Angelo;
If your name is not here with our sisters and brothers,
I'll add to the list the addendum—"and others."
Our members' professional writings abound
In volumes of vital research: we have found
Botanical treasures the world never knew
As well as a gaggle of trivia, too;
For instance, one member has found that Linnaeus
Once grumbled, "No matter how much they may pay us,
You can be sure that the wicked economy
Shortly will lay a tremendous Tax-on-o-me!"
(That derivation is open to question,
But someone will find a more valid suggestion.)

Now, is there a club that can mark its centenary So free of corruption and scandal and venery? Minds so devoted to pleasures botanic That some of our spouses regard us as manic! Some of this group are revisiting Harvard, Some come to find out what's been lately "discarvered;" Some meet their old colleagues and thump on their shoulder And tell them they don't look a single bit older! Some come to relax and perhaps get a snoot-full, But for most, the occasion is sober and fruitful,— A time to reflect on the glorious past, And a time when our eye to the future is cast; The next hundred years for the students of botany Surely will chase any thoughts of monotony— Challenges, problems, there will be no dearth Of issues that threatened the health of the earth, But well in the forefront of progress will be The men and the women of the N.E.B.C.

ADDITIONAL READING

Deane, Walter. 1899. The herbarium of the New England Botanical Club. Rhodora 1: 56–57.

HOWARD, R. A. 1973. A partial history of the New England Botanical Club. Rhodora 75: 493–516.

- ——. 1986. The New England Botanical Club 800th meeting. [A tribute to M. L. Fernald.] Rhodora 88: 159–228.
- KNOWLTON, C. H., M. L. FERNALD, AND F. G. FLOYD. 1912. Field excursions of the New England Botanical Club. Rhodora 14: 71–76.
- Pease, A. S. 1951. The New England Botanical Club a half-century ago and later. Rhodora 53: 97–105.
- WILLIAMS, E. F. 1899. The New England Botanical Club. Rhodora 1: 37-39.